

WHAT IS CLAIMED

1. A method of controlling the operation of a system for geolocating objects within a monitored environment, wherein RF transmissions from tags associated with said objects are detected at a plurality 5 of spaced apart monitoring locations containing tag transmission readers, and outputs of said tag transmission readers are coupled to an object location processor which processes outputs of said tag transmissions to geolocate said tags and thereby their 10 associated objects within said monitored environment, said method comprising the steps of:

(a) generating, from at least one location of the monitored environment that is proximate to a region which a tagged object may enter, a magnetic field encoded with 15 information intended for a tag entering said region; and

(b) at a tag that has entered said region, detecting said magnetic field and causing said tag to perform a prescribed function.

2. A method according to claim 1, wherein step (b) comprises causing said tag to change the repetition rate of RF transmissions therefrom.

3. A method according to claim 1, wherein step (b) comprises causing said tag to increase the repetition

rate of RF transmissions therefrom while said tag is proximate to said region, and thereafter causing said tag 5 to revert to its previous repetition rate after said tag is no longer proximate to said region.

4. A method according to claim 1, wherein step (a) comprises providing a distribution of magnetic field generators proximate to said region, and causing said distribution of magnetic field generators to generate a 5 plurality of magnetic fields encoded with said information and which provide complete spatial coverage for said region irrespective of the orientation of said tag.

5. A method according to claim 4, wherein said region comprises a passageway connecting separate portions of, or has mobility within, said monitored environment.

6. A method according to claim 1, wherein step (a) comprises frequency shift key encoding said magnetic field in accordance with said information.

7. A method according to claim 1, wherein said magnetic field is capable of penetrating media that block radio signals.

8. An arrangement for controlling the operation of a system for geolocating objects within a monitored environment, wherein RF transmissions from tags associated with said objects are detected at a plurality 5 of spaced apart monitoring locations containing tag transmission readers, and outputs of said tag transmission readers are coupled to an object location processor, which processes said outputs of said tag transmissions to geolocate said tags and thereby their 10 associated objects within said monitored environment, said arrangement comprising:

at least one magnetic field generator located proximate to a region which a tagged object may enter, and being operative to generate a magnetic field encoded 15 with information intended for a tag entering said region; and

a magnetic field receiver installed on said tag and being coupled with RF transmission circuitry of said tag, and being operative, in response to detecting said 20 magnetic field, to cause said tag to perform a prescribed function.

9. An arrangement according to claim 8, wherein said magnetic field receiver is operative to cause said tag to change the repetition rate of RF transmissions therefrom.

10. An arrangement according to claim 8, wherein said magnetic field receiver is operative to cause said tag to increase the repetition rate of RF transmissions therefrom while said tag is proximate to said region, and
5 to cause said tag to revert to its previous repetition rate after said tag is no longer proximate to said region.

11. An arrangement according to claim 8, wherein said at least one magnetic field generator comprises a distribution of magnetic field generators proximate to said region, which are operative to generate a plurality
5 of magnetic fields encoded with said information and provide complete spatial coverage for said region irrespective of the orientation of said tag.

12. An arrangement according to claim 9, wherein said region comprises a passageway connecting separate portions of, or has mobility within, said monitored environment.

13. An arrangement according to claim 9, wherein said at least one magnetic field generator is operative to frequency shift key encode a magnetic field generated thereby in accordance with said information.

14. An arrangement according to claim 9, wherein said magnetic field is capable of penetrating media that block radio signals.

15. An arrangement according to claim 9, wherein said magnetic field generator is capable of programming said tag.

16. An arrangement according to claim 9, wherein said magnetic field generator is configured to selectively address multiple tags or individual tags located proximate to said region.

17. For use with a system for geolocating objects within a monitored environment, wherein RF transmissions from tags associated with said objects are detected at a plurality of spaced apart monitoring locations containing 5 tag transmission readers, and outputs of said tag transmission readers are coupled to an object location processor, which processes said outputs of said tag transmissions to geolocate said tags and thereby their associated objects within said monitored environment, an 10 arrangement for controlling the operation of a tag that comes within a prescribed proximity of prescribed region of said monitored environment, said arrangement comprising:

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at least one magnetic field generator located
15 proximate to said region and being operative to generate
at least one magnetic field modulated with information
used to control the operation of said tag; and
a magnetic field receiver installed on said tag and
being coupled with RF transmission circuitry of said tag,
20 and being operative, in response to detecting information
modulated on said at least one magnetic field by said at
least one magnetic field generator, to cause said tag to
increase the rate of RF transmissions thereby.

18. An arrangement according to claim 17, wherein
said at least one magnetic field generator comprises a
distribution of magnetic field generators proximate to
said region, which are operative to generate a plurality
5 of limited range magnetic fields encoded with said
information and arranged to provide complete magnetic
field spatial coverage for said region irrespective of
the orientation of said tag.

19. An arrangement according to claim 18, wherein
said region comprises one of a passageway connecting
separate portions of or has mobility within said
monitored environment.

20. An arrangement according to claim 18, wherein

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said at least one magnetic field generator is operative to frequency shift key encode at least one magnetic field generated thereby in accordance with said information.